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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/766,357
Filing Date: January 19, 2001
Appellant(s): MOORE, BRUCE WAYNE

Francis Lammes
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 6/19/2006 appealing from the Office action mailed 3/29/2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

20020040374	Kent	04-2002
6826727	Mohr	11-1999
20020059339	McCormick	09-2001
6801333	Weiss	06-2000

Cornuejols, Gerard and Michael Trick. "Quantitative Methods for the Management Sciences" 45-760 Course Notes. Fall 1998.

Dowling, Melissa. "Breaking the Pagination Rules" Catalog Age. June 1997, pp. 77-79.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 8-10, 17-19, 26, and 27 are rejected under 35 U.S.C. 103(a) as unpatentable over Kent (U.S. Patent Pub. No. 2002/0040374 Al) in view of Cornuejols, et al. (Cornuejols, Gerard and Michael Trick, Quantitative Methods for the Management Sciences: 45-760, Course Notes, Fall 1998, herein "Cornuejols").

Kent discloses a method including steps of developing models to predict customer purchases (Kent at FIG. 4 at 100 and Paras. 0062-0068, "automatic personalization software program"), scoring customers for each predictive model (Kent at Paras. 0066-0068, "establishes priorities based upon criteria"), determining specific layout areas (Kent at Paras. 0091 and 0095- 0096, "standard design template" or "an aesthetically pleasing, readable final page"), determining where a particular product can be placed in the layout (Kent at Para. 0098, "match the relevant content and advertising, with a particular subscriber's predetermined desires and preferences"), and using an optimization model to customize the layout for customers (Kent at FIG. 5 at 48, Paras. 0077-0082, "optimization program," and Paras. 0098-0099, "final content of publication is variable"). Although Kent teaches limitations of Appellant's base Claim 1 including using an optimization model to customize a layout, Kent does not explicitly disclose that the optimization model is one of a transportation model, network model, or generalized network model. Cornuejols teaches various methods of network optimization (special types of linear programming or constraint-based models) including a transportation model (Cornuejols at §11.3.3), a network model (Cornuejols at §11.4), and a generalized network model (Cornuejols at § 11.5). Accordingly, it would have been obvious to modify the optimization model feature of Kent to include any one of the transportation model, network model, or generalized network model taught by Cornuejols to advantageously provide a quick and intuitive approach to customizing a layout (Cornuejols at § 11.1).

Moreover, Kent provides customizations directed at a niche market or individual customers (Kent at Para. 0007, "an individual, or a small group of subscribers"), thereby anticipating Appellant's Claims 8-9.

Claims 2, 11, and 20 are rejected under 35 U.S.C. 103(a) as unpatentable over Kent in view of Cornuejols , and further in view of Mohr et al. (U.S. Patent No. 6,826,727 B1, herein "Mohr").

As discussed in detail above, Kent teaches all limitations recited in Appellant's Claim 1. However, Kent does not explicitly provide that the step of determining specific layout areas includes determining the maximum and minimum possible sizes for each product layout. Mohr provides an automatic document layout system that maximizes or minimizes shape elements, thereby teaching the element deficient from Kent (Mohr at Abstract, Col. 3, *L.* 33-48, and Col. 18, *L.* 38-56). Accordingly, it would have been obvious to one of ordinary skill in the art at the time Appellant's invention was made to modify Kent to include the maximum and minimum size determination step of Mohr for advantageously providing a useful tool for automatically arranging and sizing document elements (Mohr at Col. 3, *L.* 45- 48).

Claims 3, 12, and 21 are rejected under 35 U.S.C. 103(a) as unpatentable over Kent in view of Cornuejols, and further in view of McCormick et al. (US. Patent Pub. No. 2002/0059339 Al, herein "McCormick").

Kent does not explicitly teach that the step of determining specific layout areas further includes determining a preference multiplier for each layout area. McCormick provides a system that establishes correlations between the design and content elements of a first document and responses of recipients (McCormick at FIG. 4 and Para. 0027). Thus, it would have been obvious to one of ordinary skill in the art at the time Appellant's invention was made to modify Kent to include the preference multiplier feature of McCormick to advantageously assist in designing a document in a manner that is not merely aesthetically attractive but demonstrably effective (McCormick at Para. 0070).

Claims 4, 13, and 22 are rejected under 35 U.S.C. 103(a) as unpatentable over Kent in view of Cornuejols, and further in view of Dowling (Dowling, Melissa, "Breaking the Pagination Rules," Catalog Age, June 1997,77-79), and Weiss (U.S. Patent No. 6,801,333).

While Kent does teach a print manager for printing (Kent at FIG. 1 at 34), Kent does not explicitly disclose a step of passing the optimization model output to the print manager for printing only if the expected profit exceeds the production cost of the customized layout. Dowling describes a printing condition in which the average price of items on a catalog page are required to be greater than the cost of printing the page (Dowling at p. 79). Dowling does not explicitly discuss printing criteria comparing *expected profit* to production cost. However, Weiss teaches comparing expected profit to cost for evaluating the desirability of printing a document (Weiss at Col. 1, *L.* 45-53).

Accordingly, motivated by higher returns to layout customization (Dowling at p. 79), it would have been obvious to one of ordinary skill in the art at the time Appellant's invention was made to modify Kent in view of the teachings of Dowling and the expected profit teachings Weiss for providing a step of passing the optimization model output to a print manager for printing only if expected profit exceeds the production cost of the customized layout.

(10) Response to Argument

Appellant states "The Examiner acknowledges that Kent does not teach an optimization model used to customize the layout areas for customers, wherein the optimization model used to combine the layout areas is at least one of a transportation model, a network model, or a generalized network model" (Appeal Brief, Page 10). This may be misleading, as Examiner has specified in the 103(a) rejection that Kent, in fact, does teach an optimization model to customize a layout. The feature of the claimed invention that isn't specified by Kent is the particular type of optimization model that may be used. Examiner's argument is that one skilled in the art of optimization (Kent) would find it obvious to use any optimization model as taught by Cornuejols.

In response to the 35 U.S.C. 103(a) rejection for claims 1, 8-10, 17-19, 26, and 27, Appellant states that "none of the terms nor is the entire *Cornuejols* reference directed to customizing direct marketing materials" (Appeal Brief, Page 11). Appellant argues that, based on this, there are no reasons to combine references Cornuejols and Kent other than those provided in the Appellant's specification. Kent acknowledges the

availability of multiple optimization programs with the statement, "In most optimization programs, there are a number of conflict evaluation criteria..." (Kent, Paragraph 0077). Cornuejols teaches a copy of instructional notes used by a professor in a university setting to teach students (those attempting to become skilled in the art) optimization. While Cornuejols specifies the examples as network optimization, Cornuejols teaches the concept and principles of optimization using transportation model, network model, and generalized network model. Anyone skilled in the art of optimization (having studied optimization techniques as taught by Cornuejols) would find it obvious to modify Kent using whichever model they prefer. More importantly, Kent teaches the desirability to use optimization for solving the problem of determining custom content layouts for users.

Appellant further argues "Cornuejols is directed to mathematical operations and not toward customizing direct marketing materials" (Appeal Brief, Page 13). Appellant appears to be attempting to limit Cornuejols to simple number crunching with no real-world significance. Examiner asserts that the purpose for mathematical operations is to be used in real-world operations. The customizing of direct marketing materials is a real-world operation, and just because Cornuejols does not limit the course note examples to any one real-world operation (including the one taught by the Appellant) does not mean the information taught by Cornuejols does not read on the claimed invention.

Appellant further argues "if one were somehow motivated to combine *Kent* and *Cornuejols*, and it were somehow possible to combine the two systems, the result would

not be the invention" (Appeal Brief, Page 14). From the previous statement, Appellant appears to admit that there is a possibility of combining the 2 references. Examiner, however, feels that Appellant has failed to provide clear and convincing reasoning that the combination of Kent and Cornuejols would not create the same invention. Examiner feels that the combination of Kent and Cornuejols would indeed result in the claimed invention.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Michael Bekerman MB

JEFFREY D. CARLSON
PRIMARY EXAMINER

Conferees:

Jeffery Carlson JC

Eric Stamber ES